

TRI-WEEKLY KENTUCKY YEOMAN.

VOL. 4.

FRANKFORT, KENTUCKY, OCTOBER 12, 1854.

[NO. 94]

TRI-WEEKLY KENTUCKY YEOMAN.

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New Cabinet Wareroom and Manufactory.

JOHN D. RAKE.

R AKE EFFECTFULLY informs his friends that he is now located in the new Shop, on Main Street, nearly opposite the residence of Dr. Macrae, where he will go to school of art, and where he will be able to get up a good Cabinet work. Connected with shop he hasenched a Furniture Wareroom, and intends to keep a good Stock of Furniture or had, to which he will respectfully invite the attention of all wishing to purchase.

COFFINS.

Made to order at all times—night or day prompt service. JOHN D. RAKE, with which he will attend calls, at any time night or day.

Tue city or country Aug. 29 1854—\$1

Aug

The Tri-Weekly Yeoman.

FRANKFORT.
THURSDAY, - OCTOBER 12, '54.

PROCLAMATION BY THE GOVERNOR.

I, LAZARUS W. POWELL, Governor of the Commonwealth of Kentucky, do set apart THURSDAY, the 30th day of November, 1854, as a day of THANKSGIVING, and request that the people of Kentucky, on that day, suspend their ordinary pursuits, in order that all may attend on assemblies for prayer, thanksgiving and praise to Almighty God for the innumerable blessings he has bestowed upon us as a people, a State, and a nation.

IN TESTIMONY WHEREOF, I have hereunto set my name and caused the seal of the Commonwealth to be affixed. Done at Frankfort, the 10th day of October, 1854, and in the 63d year of the Commonwealth.

L. W. POWELL.

By the Governor:

GRANT GREEN, Secretary of State.

Appointments by the Commissioners for the Sinking Fund.

P. SWIGERT and W. T. HERNDON, of this city, have been appointed agents to wind up the business of the Bank of the Commonwealth and the old Bank of Kentucky.

LETTER OF H. W. BEECHER.

BROOKLYN, September 28, 1854.

DEAR SIR: I shall not be able to be with you in the celebration which you propose for September the 30th. I would be, if it were possible.

In another period, when slavery shall have been rolled away and men have recovered from the insanity with which it affects all who touch it or apologize for it, such outbursts of popular enthusiasm for personal liberty will be remembered with pleasure, we will say, that if Mr. McCreary is the nominee, the Democracy will have a man, one upon whom they can rely.

Candidates for Governor.

While nearly all the politicians and editors in Kentucky are talking about who will be the Whig and Democratic candidates for next Governor of the State, and are recommending the men of their choice, we hope we shall be excused for presenting the name of a gentleman whom we think eminently qualified for the position. We allude to Thomas C. McCreary, of Daviess county.

Mr. McCreary, is one of the very ablest men on Green River. He is possessed not only of high literary and classic attainments, and of a rich store of political information, but he is also a man of genius—of the highest order of genius. He is one of the most eloquent orators and pleasing speakers in the State, or in the West; and as a political debater he cannot be surpassed. He is at the least equal of any political speaker in the State, and the instances will be found rare in which he will not be found the superior.

In speaking or debate, he possesses the rare power of chaining his audience to their seats in rapt attention by his eloquence or logic, or of convulsing them with laughter by anecdotes or keen sarcasm. His power of ridicule is overwhelming, and woe to the poor coon who falls into his clutches.

He is a farmer—living a farmer's life on his plantation in Daviess county, surrounded by his family and friends, his ability known only in the limited circle of this district, but admired and loved by all who know him.

In person he is large, fine looking, and of commanding appearance cool, calm, and dignified in his bearing, and in his manners a thorough gentleman. His appearance upon the rostrum will always arrest attention, and no one has ever heard him speak without acknowledging that he is a man of rare intellect and great ability.

He is no political trickster or maneuverer. He is no seeker of office, and will stand in no man's way. We know not whether he would have the place if it was tendered to him and he was certain of an election. We place his name before the public because we know his ability and admire the man and his genius. He ought to be called into active service, whether he wishes to be or not. He possesses talents that should not be hidden or suffered to remain unknown.

As a Democrat there is no better one. As a Southern man he is as true as steel and firm as the eternal hills. He was a thorough-going pro-slavery man in 1849, and is a full-blooded Nebraska man in 1854. He is no Know-Nothing, and has no sympathy with any of the humbugisms of the day. He is a Jeffersonian Democrat—was born one and has lived one, and is immoveable in his glorious faith.

In the section of the State in which he resides, there is no man more popular; and as strongly Whig as are the counties of Daviess, Breckinridge, Ohio, Muhlenburg, Grayson, &c., we do not for a moment doubt that they would give him a majority for Governor. He is the man for the times and for the occasion, and we confidently believe could be elected by a handsome majority.

THE FINDLEY AND KISSANE FORGERS AT NEW YORK.—We take the following from the New York Times:

The prisoner Findley declares that there has been a regular system of "stool pigeon" operations carried on by certain parties who are concerned with Kissane and others in the forgeries. In these matters, he (Findley) claims to have been the tool of Kissane and his gang.

The forged checks which were passed on or about the 30th of August last, were as follows:

The Chemical Bank - - - \$9,000 00
The Continental Bank - - - \$6,012 59
The American Exchange Bank - 1,090 00

Total amount received on forged
ks - - - \$16,012 59

[Editorial Correspondence of the Yeoman.]
No. 104, OWEN'S HOTEL.
LOUISVILLE, October 10, 1854.

DEAR YEOMAN:—I have just returned from the Fair Grounds, and somewhat removed from the noise and bustle which has confused me all this morning. I am quietly awaiting the answer to a card, which I have just sent to my "fair lady love." While doing nothing, I concluded to write a few words to my friends in the Capital, and if, perchance it be uninteresting, say my mind was engrossed with the idea of holding "converse sweet," with one of Louisville's fairest daughters.

(I have just received the answer, and—oh! alas! my fondest hopes have proved illusions. All will be right, however, to-morrow even.)

Here in this hotel, we have an evidence of what perseverance and determination can accomplish. Mr. Owens, the gentlemanly proprietor of the establishment, with "handsome Will" and their corps of assistants, have determined that no effort of theirs should be wanting to make the Owen Hotel one of the most perfect establishments in the city. They have succeeded, as the crowds which arrive here daily testify. Over one hundred and forty persons came here yesterday, and though their hotel is the largest in the city, they are compelled to turn off a great many. Success to them say we; because they deserve it, particularly as we understand that one of our Frankfort lassies is the partner of "handsome Will," intends taking an interest in the establishment.

The dry prudence of souls that regard the public prosperity to lie in its outside peace and material wealth; the expediency and tergiversations of men from 1850 to 1854, will be, at a day not far distant, spoken of as we speak of morals and virtue at the courts of the Charleses.

I rejoice in the rescue of Jerry at the time that it happened. I have never regretted that joy. And I am free to say that I wish the public sentiment of the masses of men in the North were such that no fugitive from slavery could ever be regained. I would have the indignation of the public mind against prowling slave-hunters such, that they would be met in our highways and streets just as a fox would be, sneaking for game; or a wolf ravening for prey.

The men who rescued Jerry are, some of them, personal acquaintances of mine. In their dying hour, I believe this act of generous endeavor for the liberty of a poor and despised creature will be to them like a solacing angel.

I am respectfully yours,

H. W. BEECHER.

LETTER OF HON. CHARLES SUMNER.

BOSTON, September 28, 1854.

DEAR SIR: I cannot be with you at Syracuse according to the invitation with which I have been honored; but I shall rejoice at every word uttered there which helps to lay bare the true nature of slavery and of its legitimate offspring, the Fugitive Slave bill.

That atrocious bill has no sanction in the constitution of the United States or in the law of God. It shocks both. The good citizen, at all personal hazard, will refuse to obey it.

Yours very faithfully,

CHARLES SUMNER.

The case of the Commonwealth vs. George Grigg and Mrs. Elizabeth Frazer, in the Fayette County Court, was brought to a conclusion on Tuesday last, by requiring bail of each of them in the sum of \$5,000 for themselves and a like amount for their securities. Its consideration was concluded by M. C. Johnson, Esq., and Hon. Geo. Robertson, in powerful speeches, the former for the defense and the latter for the prosecution. Mrs. Frazer gave the required bail at once; Grigg has not yet done so, and was re-committed.

The Whole World.

The splendid Mammoth Pictorial of the Whole World, having already over \$150,000 subscribers, is only one dollar a year, by mail; and each subscriber receives a premium, a Gift Ticket, entitling the holder to one share in the valuable property which the proprietor, Prof. J. Woodman Hart, World's Hall, Broadway, New York, intends to give his subscribers, as soon as a stated number shall be obtained. This is the most stupendous undertaking we have any knowledge of, and one by which every person gets more than the full worth of the dollar invested, and a valuable present besides. Read the advertisement headed *The Whole World*, which we publish to-day, in another part of our paper.

Specimen copies of the Pictorial may be seen at this office, or obtained gratis by the publisher, by addressing him postpaid.

See advertisement of Messrs. Rigdon, Ryland & Co., Scale manufacturers, of Cincinnati. All kinds of Scales can be obtained at their manufactory.

MODESTY.—John G. Saxe, in corresponding with his own paper, noticing the celebration at Yale College, says: "Of the poem before the Phi Beta Kappa I say nothing, as the author is the husband of my wife, and is not entitled to an opinion of his own verses."

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DEATH OF REV. JOHN L. WALLER.—We

take the following notice of the death of

this eminent and talented divine, from

the Louisville Journal of yesterday:

This great and good man breathed his last at 3 o'clock yesterday afternoon. He had been sick but about twenty-four hours, and died without giving the least evidence of pain—without a struggle.

Dr. Waller has long labored in the cause of virtue, as the editor of a religious paper in this city. As a man of vast research and eminent talents, he had but few equals. While yet a student he became known to the world as a controversialist of the highest powers, and throughout his life he sustained that reputation.

Dr. Waller was a writer of real excellence.

In severe and withering sarcasm, he had few

equals; nor did he want the lighter graces of style, but would often clothe his severer logic in the most captivating beauties of rhetoric. But it is as a good man—a Christian—that his memory will ever be cherished by those who knew him. A more magnanimous heart never beat in human form. And every other excellency he possessed was heightened to a heavenly lustre by the purity of his life.

Dr. Waller was born in Jessamine county, in this State, in 1810. He was therefore but forty-four years old at his death—still in the vigor of life. His name will long be remembered among the distinguished sons of Kentucky.

W. WALLER, Agent and Keeper Kentucky Penitentiary, Frankfort, Sept. 9, 1854. Com'th copy till date.

NEW FALL AND WINTER DRY GOODS.

I AM now receiving daily my stock of Fall and Win-

ter Goods, consisting of RICH, FANCY AND STA-

PLE Goods. My stock cannot be exceeded for char-

acter and beauty. My customers and friends are invited to view.

CINCINNATI, Sept. 26, M.

Flour is dull and unsellable. Sales of 700 bbls

at \$6 75 a bbl. Whisky 30c. Provisions are

dull, and we have no sales to report. 20 bbls

linseed oil sold at 71c. Sales of 200 bbls molasses at 18c20. The weather is warm and show-

ery.

PHILADELPHIA, Sept. 23.

The president of one of our railroads yester-

day sent a challenge to one of the editors of this

city, but the latter respectively declined.

MONTRÉAL, Sept. 22.

The Maine Liquor Law is to be introduced to

the Canadian Parliament on Monday next, and

the impression is it will be eventually successful.

N. Y., Sept. 23.

It is now positively ascertained that Mr. Schuyler, the abounding President of the New Haven railroad is in Europe, and it is understood that officers have gone over to effect his arrest

and removal to this country.

PHILADELPHIA, Oct. 6.

A dispatch from Bridgeton, N. J., says that

on Thursday night a man named William Cary,

a resident of Millville, N. J., whilst running

home from Philadelphia, on foot, and about one

mile of his house was shot, robbed, and left lying

on the road, where he was found in a dying condition.

The persons who attacked him are supposed to be Frenchmen—one of them is described

as having on a cap, and the other a few crowns.

BALTIMORE, Oct. 9.

Three weeks later news from Fort Larimore

has been received at the War Department. Thir-

ty-one troops were killed by the Indians in a late

battle, but no subsequent attack had been made

on the fort.

Wm. Darby, an American stationer and geo-

grapher, died at Washington to-night.

The Democrats held a large meeting to-night.

The Know-Nothings also made a large demon-

stration, marching through the streets in im-

ense numbers with banners music, &c. Ex-

citement is going up to fever heat.

The Governor of Maryland has appointed the

23d inst. as Thanksgiving day.

CINCINNATI, Oct. 10.

It is conceded

The Cri-Weekly Yeoman

GEOLICAL SURVEY OF KENTUCKY.

EXECUTIVE DEPARTMENT,
FRANKFORT, KY., OCT. 8, 1854.

To the Editor of the Yeoman:

DEAR SIR: I received from Dr. David D. Owen, State Geologist, a brief preliminary report of the mineral resources in a few of the South-western counties. The information contained in the report I deem of importance to those owning land in that region of the State, and to the country generally. I therefore request you to publish it in your paper.

The quantity of coal in the counties of Hopkins and Muhlenburg and the adjoining country surpasses the most sanguine expectations of those best acquainted with the country. The matter contained in this report will make known to the people some of the advantages that will result from a geological survey of the State. This survey properly carried out will be worth millions to Kentucky. I have every confidence that the patriotic and good sense of the people of Kentucky, will not allow this great work to stop until they have a minute and thorough geological survey of the entire State. Dr. Owen is devoting himself with zeal and industry to the work before him. He is fully maintaining the very good reputation he has heretofore won in this field of science. I am well assured that he will turn the means at his disposal to the very best account.

Respectfully,

Your obedient servant,

L. W. POWELL.

Excellency, Governor Powell, of Kentucky:

SIR: At the present juncture of affairs touching the subject of internal improvement, either under contract or in contemplation or construction in some of the counties of South Western Kentucky, through which the preliminary geological survey has just extended, it has occurred to me that a short communication and description of some of the mineral and geological resources of that district, made in advance of my report to be submitted hereafter, would, at this particular period, be appropriate and useful to the interests of South Western Kentucky.

In meandering the Southern margin of the South-Western coal field of Kentucky, from the sources of Tradewater river, in Hopkins county, to Green river, in Muhlenburg county, I found the whole country full of geological interest. There is hardly a section of stream or ravine but what discloses materials that must eventually disseminate wealth amongst the possessors of the soil.

The clue to the geological features of this region of Kentucky is, perhaps, best exhibited in the sections laid bare from the lowest ground visible in Richland creek towards the summit of Wright's Ridge in Hopkins county.

This section is comprised in a vertical cut of from 300 to 350 feet; its base being elevated about 200 feet above high water of the Ohio river. This space of 300 feet includes no less than six workable beds of coal, now for the first time identified as distinct superimposed beds, separated by spaces, varying from two and a half to sixty feet; and three of these beds lie within a vertical space of 30 feet toward the base of the section, as presented on the Hunting branch of Clear creek, near the dividing ridge situated between Tradewater and Pond rivers.

The average thickness of the six beds is nearly five feet and their united thickness but little, if at all, short of 30 feet of solid coal.

Around the uplift of the strata prevalent in the vicinity of Wright's Ridge the whole of these six beds of coal are accessible above the drainage of the country.

It is important also to observe that in some of the spaces included between these various beds of coal, as present hidden by debris, there is every probability that the detailed survey will discover other intermediate beds of coal, some of which may be workable.

Towards the South these beds of coal feather out, not all at the same localities, but in succession over a belt of country included between curved and somewhat zigzag lines extending nearly East and West through Hopkins and Muhlenburg counties. The Northern of these conform, in a measure, to the heights of the Lick and Caney Fork branches of the sources of Drake's creek, in Christian county, and the ridges that give origin to Cypress branch of Pond river, and the head of Pond creek tributary to Green river, in Muhlenburg county. South of this line the crest superior of the beds run out; but North of this line they continue with a waving North dip which brings them towards the centre of the two counties, nearer the level of the principal streams. The Southern line of termination of the lowest of these coal beds runs through the Northern portion of Christian county and along the Southern confines of Muhlenburg county.

In consequence of the Northernly and North-Westly waving dip of these coal measures towards the centre of the great Illinois coal field, these beds underlie the whole of Henderson and McLean counties, modified, however, somewhat in thickness, relative proximity and probably also in quality.

This group of coals displayed in Wright's section, occupies the base of the coal measures just above the Millstone grit and associate conglomeration, and comprising therefore, the deepest seated coal beds of the South-Western Kentucky coal field—beds which run many hundred feet under the level of the Ohio river at Henderson.

At this stage of the survey it would be premature to pronounce with certainty as to the precise identity of the beds of Wright's section and those struck in the artesian well bore by Mr. J. G. Holloway, of Henderson county; but it is probable that at least four of the beds of coal passed through in boring the entire space above the highest of the Wright's section series. Hence, in the vicinity of the Ohio river in Henderson county, both the upper and lower series can be gained by drifts and shafts. Muhlenburg and Hopkins counties offer the best opportunities, therefore, of reaching the lower beds of the coal basin by drifts above the general drainage; but Henderson county possesses the greatest number of beds accessible chiefly by shafts.

It is to be borne in mind, however, that the same bed does not always preserve a uniform thickness over extended areas; on the contrary, it will probably be frequently found to be the case that beds which are thick towards the South and West, will thin in a North and East direction and vice versa. The determination of such facts or laws as these, together with the estimation, from the elements of dip, and variation of thickness of the interposed strata at distant sections, of the depth of which any given bed may be reached by a shaft or discovered in a hill side, are some of the important results which are aimed at in carrying out the detailed survey. All correct records of borings or diggings made either in search of coal, water, brine, or other materials are always so much information towards this desirable knowledge. I, therefore, take this opportunity of requesting all citizens of Kentucky undertaking such works to be very precise in noting the thickness of different beds passed through, such as sandstone, argillaceous shale, black bluish mud shale, coal, limestone, flinty or siliceous rocks, pyrites, &c. and in preserving these records for the benefit of the geological survey in which every citizen of the State is deeply interested, and which, if prosecuted in detail according to the plan which I have in view, and with sufficient force and means, must prove of enduring benefit to every enterprise which may be undertaken, as well as to the citizens at large; even if they

should not be the owners of what, in the common acceptance of the term, is denominated "mineral lands."

How forcibly we might be struck with the intrinsic value of coal land, when we reflect on the fact that this fuel is becoming every day more in demand both for domestic use and for manufacturing purposes, and calculate that a bed of coal, five feet thick, extending under one acre of ground, will yield, in round numbers with ample allowance for waste and slack, 100,000 bushels of coal, which amount, at the small profit of 3 cents per bushel, produces an income of three thousand dollars; and this, if it be judiciously mined, without impairing one iota of the agricultural value of that acre of ground. On the contrary, the coal slack and the marl clays—the waste products of many of these mines—have been found highly beneficial as mineral manures, when applied to certain kinds of lands. Of course six times that amount of income might be realized from each acre underlaid by the six beds of coal of Wright's Ridge, if within a reasonable distance from the surface. Yet this is but a part—and a small part—of the mineral wealth of Kentucky.

In regard to the quality of this lower group of coals, as they occur in Muhlenburg and Hopkins counties, I refer to the subjjoined chemical analysis given of a few of these beds in the ascending order. The particular specimens selected were obtained from the openings where I had the best opportunity of securing fair samples of the coal.

No. 1. Terry's coal, three-quarters of a mile North of the Southern boundary of Hopkins county, on the Bull branch of Buffalo creek, near the sources of Tradewater:

Specific gravity 1.278.

Water - - - - - 3.5

Volatile gases - - - - - 38.7

Fixed carbon in coke - - - - - 54.8

Ashes (light gray) - - - - - 3.0

100.0

Total volatile matter - - - - - 42.47

Coke - - - - - 57.53

This coal lies from 5 to 15 feet beneath a heavy bed of sandstone, which forms a conspicuous land mark in the high grounds lying between the heads of Casey and Tradewater and the sources of Drake's creek, flowing into Green river. The surface of this coal presents iridescent hues with laminae of calcite running in a kind of net work through the joints intermixed with some ochreous powder. Yet it affords but a small quantity of ashes; but slightly coherent in burning. So far as the chemical examination has yet been carried for determining the properties of the above described coals, this bed indicates the largest amount of fixed carbon in the coke. But to obtain a fair average it is necessary to repeat the analysis on different portions of each bed.

Eighty feet above this bed of coal, in an adjacent hill, is another bed; but as there is only a partial natural section visible, I had no opportunity of procuring a fair sample for analysis.

In reference to the foregoing chemical examinations it is necessary to observe that there is, no doubt, considerable modification in the quality of the same bed, as well as in the thickness, at distant points; hence each particular bed requires a separate analysis of various specimens collected from each important locality to be able to form a perfectly just opinion of any change which may occur in its composition over extended areas. It requires, moreover, often two or more analyses of samples taken from the top, bottom and perhaps middle portion of the same bed to ascertain any variation that may exist in different portions of the bed at the same opening. Thus thoroughly to evaluate the value of a coal, for manufacturing purposes, requires laborious researches in the laboratory, especially if in connection with this class of analysis, here given, an ultimate analysis of the proportion of the elementary principles it may contain be required, which is often necessary, especially when it is desired to determine the luminous power of volatile gases and the presence or absence of sulphur and nitrogen together with the total amount of carbon both in the coke and gaseous products. Such extended investigations can only be undertaken in case the survey is hereafter carried out on the detailed plan which I consider the importance of the work will ultimately demand.

The coals to which I have particular directed attention in this communication will fall into the group of bituminous and fat-bituminous varieties, corresponding in chemical constitution most closely to the Liverpool and New Castle coals of England, and the varieties of Pittsburg coals of this country analysed by Johnston, and Hayes and Rogers, as will be seen by the subjjoined results obtained by these authors as recorded in their works:

Liverpool coal, England, analysed by Johnston.

Specific gravity 1.218.

Water - - - - - 5.00

Volatile gases - - - - - 36.42

Fixed carbon in coke - - - - - 54.72

Ashes (white) - - - - - 3.80

100.00

Total volatile matter - - - - - 42.42

Coke - - - - - 57.58

109.00

This is the most Southern bed of coal of Hopkins county, and underlies heavy beds of sandstone. It is probably the same bed which can be traced on either side of the Buttermilk road into Christian county between 2 and 3 miles South of the county line towards the sources of Tradewater. It is one of the lowest, if not the lowest, workable bed of the Southern part of the basin. It varies from 3 feet to 3 1/2 inches thick. Has little disposition to coker in burning. Does not swell up much in coking; coke of moderate density.

This coal exhibits the structure of the original wood from which it has been derived in wonderful perfection; particularly the sap vessels, which appear under the magnifier, as minute solid cylinders of coal projecting beyond the general surface of the coal.

No. 2. Roberts coal, Muddy creek, Muhlenberg county:

Specific gravity 1.218.

Water - - - - - 5.00

Volatile gases - - - - - 36.42

Fixed carbon in coke - - - - - 54.72

Ashes (white) - - - - - 3.80

100.00

Total volatile matter - - - - - 41.43

Coke - - - - - 58.56

100.00

The specimen analysed was selected from the lower part of the bed which is the most solid and brightest portion. The coal is slightly coherent when ignited, and burns with a strong yellow flame, issuing from sulphurous acid and sulphurated hydrogen. It swells up slightly in coking and leaves a bright coke, rather above the medium density. The black part of this coal withstands the action of the water as well, if not better, than any of the coals of which I am at present treating.

No. 3. Box Mountain Spring coal, Hopkins county:

Specific gravity 1.339.

Water - - - - - 6.00

Volatile gases - - - - - 34.75

Fixed carbon - - - - - 50.25

Ashes (white) - - - - - 9.00

100.00

Total volatile matter - - - - - 40.75

Coke - - - - - 59.25

100.00

This coal underlies the "Black Band." It is laminated in structure, being composed of alternate dull and bright layers with some white and ochre powder in the joints. In coking it swells up considerably, forming a bright but light and cellular coke. At Williams Landing, in Muhlenburg county, this coal is what is technically called a "coal brash," arising probably from that locality being near its marginal termination towards the South east. At that point of Green river it lies 50 feet below the bed of Green river, but rises to about 30 feet above Green river, at Van Landingham's, a few thousand yards above.

No. 4. Main coal of the Hunting branch of Clear creek, in Hopkins county; 6 to 9 feet thick:

Specific gravity 1.305.

Water - - - - - 5.40

Volatile gases - - - - - 39.80

Fixed carbon in coke - - - - - 50.70

Ashes (gray) - - - - - 4.10

100.00

Total volatile matter - - - - - 45.20

Coke - - - - - 54.80

100.00

The specimen analysed was taken from the Sisk bank where this bed of coal in well displayed in adit levels newly opened. It may be considered the main coal of Hopkins and Muhlenburg counties, often having a solid roof of dark limestone with the intervention of a few inches to a foot or more of black shale.

Occasionally the limestone is thin or absent and then replaced or accompanied by large segregations of carbonate of lime and carbonate of black and reddish iron. In Hopkins county it varies from three inches to one foot, and usually presents the form of solid, heavy, dark colored slabs, like dog stones.

This is a bright coking coal with thin lamellae of selenite occasionally filling the joints. It swells up little in coking, forming a light but coke of sooty aspect with bright portions projecting therefrom.

The Main Pigeon Run coal, owned by Capt. Davis, in the South western part of Hopkins county, the Martin coal, 3 miles West of North of Greenville, Muhlenburg county; the main coal under limestone on Pond river at Elwood; as well as the McLean coal at Paradise or Airlie, on Green river, in Muhlenburg county, are all equivalent beds, identified throughout by a thin clay parting of two or three inches, about four feet from the top of the coal; also by its thickness, usually exceeding six feet, and generally by its limestone roof—since this limestone is locally capable of receiving a polish and of affording a dark grey or black marble where the rock is sufficiently compact and free from imperfections and flaws.

No. 5. The Jackfield coal, owned by Capt. Davis, of Hopkins county; from 5 feet 1 inch to 4 feet 6 inches thick:

Specific gravity 1.294.

Water - - - - - 4.00

Volatile gases - - - - - 39.75

Fixed carbon in coke - - - - - 50.75

Ashes (nearly white) - - - - - 5.50

100.00

Total volatile matter - - - - - 43.75

Coke - - - - - 56.25

100.00

This is probably the same bed of coal known as the Eave's coal, a mile or two North of Green-

ville, in Muhlenburg county. This coal is not quite so bright a coal as the preceding, excepting the bright laminated layers alternating with those of a duller aspect. It is a more brittle coal than No. 4. Concretes but slightly in burning. Does not swell much in coking. Coke like that of No. 4.

No. 6. The Gamblin coal, now owned by Burbank and Dunville, situated on the head waters of Stewart's creek:

Specific gravity 1.270.

Water - - - - - 3.40

Volatile gases - - - - - 39.07

Fixed carbon in coke - - - - - 56.13

Ashes (pale flesh colored) - - - - - 1.40

100.00

Total volatile matter - - - - - 42.47

Coke - - - - - 57.53

This coal lies from 5 to 15 feet beneath a heavy bed of sandstone, which forms a conspicuous land mark in the high grounds lying between the heads of Casey and Tradewater and the sources of Drake's creek, flowing into Green river. The surface of this coal presents

